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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) 0002245.0027	
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		Filed <u>July 9, 2003</u>	
		First Named Inventor <u>Jonathan H. Fischer</u>	
		Art Unit <u>2828</u>	Examiner <u>Tod Thomas Van Roy</u>
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input type="checkbox"/> attorney or agent of record. Registration number _____</p> <p><input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>55,430</u></p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <p><input type="checkbox"/> *Total of _____ forms are submitted.</p>			

Signature

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February 27, 2008

Date

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

Application No. : 10/616,334 Confirmation No. 1363  
Applicants : Jonathan H. Fischer, et al.  
Filed : 07/09/2003  
Group Art Unit : 2828  
Examiner : Tod Thomas Van Roy  
Docket No. : 0002245.0027  
Title : Optical Midpoint Power Control and Extinction Ratio  
Control of a Semiconductor Laser

Mail Stop AF  
Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

**ARGUMENTS ACCOMPANYING  
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

Please consider the following arguments in connection with the Pre-Appeal Brief Request for Review being filed concurrently herewith:

## **ARGUMENTS**

### **I. Introduction**

This is in response to the Final Office Action dated November 30, 2007. The Final Office Action maintained the rejections of claims 1, 2, 5-8, 11, 13, 19, 22, 25, 26, 29, 30, 38, 40, and 41. The Final Office Action objected to claims 3-4, 9-10, 12, 20-21, 23-24, 27, 31-32 and 39 as being dependent upon a rejected base claim, but indicated they would be allowable if rewritten in independent format including all of the limitations of the base claim and any intervening claims.

### **II. Rejections - 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a)**

Claims 1, 2, 5, 7-8, 11, 13, 19, 22, 25, 29, 30, 38, 40, and 41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,993,459 ("Carrick"). Applicants respectfully traverse this rejection.

First, Applicants claim, in independent claim 1, "the semiconductor laser generates the optical signal with a power level approximate to a predetermined optical midpoint power level" (emphasis added). Independent claim 40 recites similar features. In the final rejection of claim 1, the Examiner refers to Carrick, Col. 4, lines 40-45 to show this claim feature. In the rejection of independent claim 40, the Examiner refers back to the rejection of claim 1 without further explanation. This feature is not shown in Carrick. See, for example, Applicants' Response filed August 24, 2007 at least at pages 5 to 6.

The cited section of Carrick clearly states "the extinction ratio can be calculated" (emphasis added) and "the processor can generate the extinction control signal on line 34 which is applied to the extinction control input 8 of laser driver 6 for controlling the extinction ratio" (emphasis added). Carrick defines "extinction ratio" at least in Col. 3, lines 39-42 as a ratio of power levels. Therefore, this ratio of power levels is unitless, is not a power level, is not "predetermined", and cannot be "a power level approximate to a predetermined optical midpoint power level" where the optical midpoint power level is defined "by calculating an arithmetic mean of a plurality of optical power levels" as recited in independent claim 1 and similarly in independent claims 22, 38, and 40. See

also Applicants' Response filed August 24, 2007 at least at page 2, third paragraph to page 3, first paragraph.

Further, the Examiner admits in the Response to Arguments section of the Final Office Action, "Carrick computes an arithmetic mean of a plurality of power levels *in order to determine an extinction ratio*" (emphasis added). As shown in Carrick, Col. 3, lines 21-59 and Col. 4, lines 40-45 (cited by the Examiner), Carrick computes an average power as an intermediate step to calculating an extinction ratio and never uses the average power as the power level of the optical signal generated by the semiconductor laser.

Regarding independent claims 22 and 38, Applicants claim "the semiconductor laser to generate the optical signal having substantially the predetermined optical midpoint power level," similarly to independent claims 1 and 40. Inexplicably, the final rejections of independent claims 22 and 38 persist in referring to the rejection of dependent claim 5 to show that Carrick discloses this limitation, even though dependent claim 5 does not recite this limitation. See, for example, Applicants' Response filed August 24, 2007 at least at page 6, fifth paragraph, to page 7, first paragraph. As with independent claims 1 and 40, these features of independent claims 22 and 38 are not shown in Carrick. See also Applicants' Response filed August 24, 2007 at least at pages 5 to 6.

Applicants respectfully submit that this is the exact rejection in the Office Action of May 24, 2007 and this clear error was pointed out in Applicants' Response filed August 24, 2007, but remains unaddressed by the Examiner. It is unclear how the Examiner could have "fully considered" Applicants' arguments and found them "not persuasive," but failed to address Applicants pointing out that some limitations of Applicants' independent claims 22 and 38 are never properly discussed in an Office Action or shown in Carrick. For this reason alone, the Examiner fails to show how Carrick could anticipate independent claims 22 and 38. However, as discussed above, even if the rejections of independent claims 1 and 40 are applied to independent claims 22 and 38, the reference fails to show the claimed limitations.

In view of this, Applicants respectfully 35 U.S.C. §102(e) rejections of independent claims 1, 22, 38, and 40 are without factual basis and should be withdrawn.

Second, the Examiner makes a clear error in stating "the optical midpoint power level has not been defined in the claims, leaving the interpretation open to a broad degree" (Final Office Action, Page 5, Paragraph 1). Each independent claim clearly defines the optical midpoint power level as "an arithmetic mean" of a plurality of power levels. Given the clear claim language and the definitional support in Applicant's Specification at least at Paragraph [0032], Applicants submit that the Examiner has ignored limitations of Applicants' claims. Therefore, the "interpretation that the optical midpoint power level is the power level obtained when the corrective control signal is applied to the laser for extinction ratio adjustment" is erroneous and, since the entire §102 rejection is based on this incorrect "interpretation", the rejection is a misrepresentation of both Applicants' claims and Carrick and is factually incorrect. See also, Applicants' Response filed August 24, 2007 at least at page 2, third paragraph to page 3, first paragraph and page 6, second and third paragraphs.

Third, Applicants recite in independent claim 22, among other things, "modulating the semiconductor laser at a first modulation level when the input data signal has a first logical state and modulating the semiconductor laser at a second modulation level when the input data signal has a second logical state" (emphasis added). Independent claim 38 recites similar features, as does dependent claim 2. In independent claim 38, Applicants also claim, "having a first optical power level in response to a first modulation current level and having a second optical power level in response to a second modulation current level" (emphasis added). Dependent claim 2 recites similar features. The Examiner points to Carrick's FIG. 2 and element 6 (a laser driver) of Carrick's FIG. 3 to show these features in the rejection of dependent claim 2. The rejections of independent claims 22 and 38 then refer back to this rejection.

However, Carrick does not show more than one modulation level (e.g., a first modulation level and a second modulation level) here or anywhere else in the reference. See Applicants' Response filed August 24, 2007 at least at page

3, first paragraph. Additionally, Carrick's FIG. 2, which the Examiner refers to as showing "a first modulation current level (fig.2 one)" (Final Office Action, Page 5, line 20) actually shows "power levels of A1 and A2 are plotted versus time" (Carrick, Col. 3, lines 22-23, emphasis added). These power levels are *not* current levels as claimed in Applicants' claims 2 and 38.

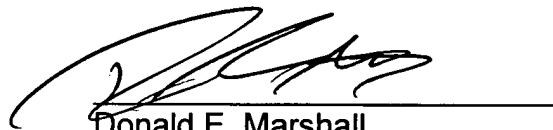
For these additional reasons, Applicants respectfully 35 U.S.C. §102(e) rejections of independent claims 22 and 38 and dependent claim 2 are without factual basis and should be withdrawn.

It follows that claims 2-13 and 19-21 (dependent upon claim 1); claims 23-32 (dependent upon claim 22); claim 39 (dependent upon claim 38); and claim 41 (dependent upon claim 40) are allowable at least for the reason that they are dependent upon an allowable base claim.

### **III. Conclusion**

For the reasons discussed above, the cited art does not teach all elements of the claims as currently pending. As a result, all pending claims are allowable over the cited art. Applicants respectfully request reconsideration of the above rejections and for prosecution on the merits to be re-opened and allowance of all claims to follow.

Respectfully submitted,



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